USGS

WATER RESOURCES RESEARCH GRANT PROPOSAL

Project ID: 2003DC32B

Title: Assessment of Soil Erosion at Hillcrest Park Facility and Its Potential Effects on the Quality of DC Water Resources

Project Type: Research

Focus Categories: Sediments, Solute Transport, Water Quality

Keywords: Sediment transport, total suspended solids, erosion, water quality

Start Date: 03/01/2003

End Date: 02/28/2004

Federal Funds Requested: $10694.00

Matching Funds: $21388.00

Congressional District: District of Columbia

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Abstract: Sediments transported from soil erosion contribute significantly to the total suspended solids (TSS) pollution load of DC water resources. According to the Anacostia River Total Maximum Daily Loads (TMDL) for TSS report by DC Department of Health/Bureau of Environmental Quality, there are excessive concentrations of TSS in DC water resources. Potential pollution sources identified are Combined Sewer Overflows, storm sewer flow, and storm water runoff or soil erosion. Recent observations indicate that many of DC Park/Recreation facilities have soil erosion problems, potentially contributing to increase TSS. This is especially so for the Hillcrest Recreation Facility located on 3100 Denver St. Washington DC. It has a stream in close proximity that receives eroded material. In an effort to reduce TSS load to DC water resources, a detailed assessment study of soil erosion at the Hillcrest Recreation Facility will be conducted. This assessment will include sources and forms of soil erosion, annual soil loss from site, distance to water resources, soil transport mechanisms, and effects of total suspended solids on nearby water resources. A cost analysis with recommendations for corrective actions and site maintenance will be provided. This assessment can be used as a model for future assessments of DC Park facilities and similar recommendations implemented as corrective and/or maintenance actions.

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